

INTERIOR HORT...for interiorscape professionals

Center for Urban Horticulture
University of Washington

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INTERIORSCAPE SEMINAR:

Pesticides—What's Legal for Interior Landscapes?

Date : Wednesday, July 15
Time : 7 to 9 p.m.
Location : Center for Urban Horticulture
Instructor : Mary Toohey

Relatively few pesticides are registered for interiorscapes. To compound this problem, pesticide labels are often confusing regarding interior landscape applications. What is deemed legal? Where can you go for an answer? Mary Toohey, agricultural chemicals registrar, Washington State Department of Agriculture, will address your questions. Find out how her department, which enforces pesticide laws in our state, interprets the labels of over 20 pesticides used by interiorscapers. Also, representatives from pesticide companies will be on hand to discuss their products which are suitable for interiorscapes. *This seminar qualifies for W.S.D.A. pesticide license recertification credit.*



RED SPIDER MITES

Let Us Hear From You

InteriorHort is a quarterly newsletter specifically for local interior landscape professionals. It will include informative articles, research updates, and notices of quarterly interiorscape seminars. We want to serve your profession as best we can, so your comments are encouraged. What subjects should be covered in this newsletter? What types of educational programs are needed by interiorscapers? Write to us at:

InteriorHort
Center for Urban Horticulture
University of Washington, GF-15
Seattle, WA 98195

Registration Form: Interiorscape Seminar

Registration Fee \$10.00

Group Rates:

Rates for firms/institutions sending two or more employees per seminar:

2-5 employees \$8/person 6 or more employees \$7.25/person

To qualify for group rates: (1) firm's registration must be received at least one week in advance; (2) all registrants must be from the same firm; and (3) total registration fee must be paid with one check or money order.

Firms using purchase orders must make prior registration arrangements.

Make checks payable to the University of Washington; no bank cards.

Portion of fees may be used for refreshments and hosting speakers.

Receipts will not be returned by mail; they will be available at the door.

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

PHONE (DAY) _____ PHONE (EVE) _____

Mail payment and registration to: Urban Horticulture Program, University of Washington, GF-15, Seattle, WA 98195

For more information please call 545-8033.

Watering and Cultivar Affect Spider Mite Resistance of Schefflera

Moisture stress makes schefflera (*Brassaia actinophylla*) more susceptible to mite infestations, and *B. actinophylla* 'Amate' is more resistant to mites than the regular *B. actinophylla*. These were the conclusions of entomologists at The Ohio State University who studied the effects of moisture stress and cultivar differences on the populations of two-spotted spider mites (*Tetranychus urticae*) under interior conditions. In their first experiment, moisture-stressed scheffleras had significantly higher levels of eggs and immature mites than unstressed plants at the end of an 18-day trial. The second experiment found that the schefflera cultivar 'Amate' had much lower mite popu-

lations at the end of a two-week trial than the species, *B. actinophylla*. It was also noted that 'Amate' had lower foliar nitrogen levels than *B. actinophylla*, and its leaves were 67% thicker. Higher nitrogen levels have been correlated with increased mite growth, while thicker leaves are thought to make mite feeding more difficult.

For additional information, refer to Effects of Moisture Stress on Two Spotted Spider Mite Populations, *Tetranychus urticae* Koch (Acari: Tetranychidae) in Schefflera (*Brassaia actinophylla* Endl.), by A. C. Colijn and R. K. Lindquist, Journal of Environmental Horticulture 4(4): 130-133, December 1986. This journal is available in the Miller Library, Center for Urban Horticulture.

INTERIOR HORT Editorial Staff:

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Interiorscape Insect and Mite Control—An Update*

James R. Baker
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North Carolina State University, Raleigh

Several changes in pesticide registration have occurred since the article, "Interiorscape Insect & Mite Control," appeared in the June '84 "NC Flower Growers Bulletin." Most notable are the cancellation of Kelthane for mite control and the withdrawal of Enstar from the market. There are a few new registrations which will be helpful for pest management on ornamental plants indoors.

Insect control on ornamental plants in public areas is a highly sensitive topic. Because the public has access to interiorscape plants, control measures must be safe for humans. Because pesticides are regulated by federal and state agencies, the selection of pesticides for use on indoor plants and the methods of application are likewise critical. The function of ornamental plants is primarily aesthetic so that pesticides must also be effective and safe for the plants.

A complicating factor for pest management in the interiorscape is that most of the plants used for indoor landscaping have at one time passed through a greenhouse in which intensive use of insecticides and miticides was the norm. Consequently, some ornamental plants when planted into malls, banks, and restaurants are infested with pests which have been selected for resistance to pesticides. Thus, pest management in interiorscapes may be more labor intensive because the selection of pesticides is limited to those which are labeled for interiorscape use and which are effective for pesticide-resistant pests.

The physiological condition of indoor plants is different from plants in greenhouse production. Indoor plants endure suboptimal light, water and temperatures and often have excessive soluble salts. Such plants do not translocate systematic pesticides well. The woody interiorscape plants, in particular, seem to translocate systematic pesticides poorly. Many of the scale, aphid, and mealybug pests of indoor ornamentals suck sap from the phloem through tiny threadlike mouthparts. Because systemics move through the xylem tissue, systematics are not effective against stem-feeding sucking pests. Most of the pest management indoors must be accomplished by spraying.

Ornamental plants in restaurants & eating areas. Spraying for insect and mite pests of ornamentals in restaurants and food handling establishments must be done

with extreme care in order to avoid contamination of food and utensils. If possible, plants should be carried out into a less critical area for treatment. If it is not possible to remove plants for treatment, then all utensils and surfaces on which food is placed should be covered during treatment. Then any area which may have become contaminated during treatment should be covered with shelf paper before replacing food or utensils.

Ornamental plants in malls, atria, lobbies, etc. (These remarks apply to use of pesticides in restaurants also.) The petroleum distillates used to dissolve pesticides may permanently stain fine wood paneling. To get good control, however, pesticides must be applied thoroughly. The use of polyethylene film to protect paneling and furniture during treatment should be considered.

Precautions:

1. Be sure plants are well irrigated before treatment to avoid pesticide injury.
2. Don't let pesticides puddle in spider plants and other foliage plants to avoid injury.
3. Ferns and ivies are exceptionally sensitive to pesticides. Poinsettia bracts are extremely sensitive to pesticides.

PESTICIDE	REMARKS
<i>alletrhin/</i> <i>resmethrin A</i>	Labeled for whiteflies & other interiorscape pests. Greenhouse whitefly may be resistant to combination.
<i>bendiocarb</i> (Dycarb, Ficam) 76% WP	Labeled for indoor plant pest control on ornamentals. Aphids, hemispherical scale mealybugs, thrips, greenhouse whitefly. (Spray to glisten, not runoff)
<i>boric acid dust</i>	Labeled for centipedes.
<i>dienochlor</i> (Myten, Pentac Aqua-Flow) 50% WP, 38% F	Labeled for mites (spider mite, broad mite, etc.) on indoor plants. Two applications a week apart may be necessary for good control.
<i>horticultural spray oil</i> 98% EC	Petroleum oils can be used as a plant shine (2 tbsp/gal) or as an insecticide for spider mite & scale control.

malathion 56%
EC

Oxamyl 10G 10%
G

pyrethrin
I/rotenone A

pyrethrum (X-Clude) A

resmethrin 23%
EC, A

soap (Insecticidal)
50.5% EC

soap and water
2%

On ferns use the plant shine rate only. For scales treat 2 or 3 times a week apart.

Labeled for indoor pest control. Good control of mealybugs, aphids, scales, thrips. Ferns are sensitive to malathion.

Labeled for interiorscape use on various pests including fungus gnats.

Labeled for indoor pest control.

Labeled for aphids, mites (?), thrips, whiteflies, scales.

Labeled for indoor plants, centipedes, scales, thrips, whiteflies (some greenhouse whiteflies may be resistant to resmethrin).

Safer Agro Chem's Insecticidal soap is very effective for spider mite & whitefly control. May be harsh on the plants, so use carefully.

Washing infested plants with mild soap & water removes aphids, spider mites, thrips, & other free moving plant pests.

* This article was reprinted from the *Illinois State Florists' Association Bulletin*, May-June 1987, and originally appeared in the *North Carolina Flower Growers' Bulletin*, December 1986.

Interior Landscape Program Advisory Group

Thanks go to the following individuals whose advice and professional experience have helped us to begin developing this continuing education program for interior landscape professionals: Jack Ballard, The Greenery; Van Bobbitt, Center for Urban Horticulture; Marilyn Giltner, Interiors in Green; George Pinyuh, Washington State University Cooperative Extension; Michelle Raymond, Interscapes; Sarah Reichard, Center for Urban Horticulture; Steve Sherman, Sherwood Forest; Sharon Thorsen, Earth Enterprises; and Dr. John Wott, Center for Urban Horticulture.